IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	09/804,621	Confirmation No.	3167
Applicant	:	Serge Willenegger, et al.		
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Art Unit	:	2475		
Examiner	:	Robert W. Wilson		
Docket No.	:	PA363DIVC1		
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Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR §1.132

Sir:

We, Jay R. Walton and John Ketchum, hereby declare that:

1. We are the Jay R. Walton and the John Ketchum who are the named inventors of U.S. Pat. No. 5,621,723 (the '723 patent).

2. We understand that claims 14 and 17-29 are currently pending in U.S. Pat. App. No. 09/804,621 (the '621 application) and stand rejected as being obvious over the '723 patent in combination with Bae (U.S. Pat. No. 5,832,387) and Raith (U.S. Pat. No. 5,930,706).

3. We understand that the Examiner contends that the '723 patent teaches the feature "receiving, by the apparatus, from a single remote station a reverse link signal that comprises a plurality of subchannel signals" recited in claim 14 of the '621 application.

4. We strongly disagree with the Examiner's contention and believe that the '723 patent clearly does not teach the feature "receiving, by the apparatus, from a single remote station a reverse link signal that comprises a plurality of subchannel signals" recited in claim 14 of the '621 application.

5. The '723 patent describes a multiple access network employing multiple channels, each channel associated with a fixed data rate. Each of the channels is available for remote stations in the network to use. A single remote station selects ONE of the available channels to use (based on the data rate that the remote station elects to employ) and transmits on the selected channel. The remaining channels are available for the other remote stations to use.

6. A single remote station that selects ONE channel from among multiple channels available to remote stations in a network and transmits on the selected channel, as described in the '723 patent, is clearly and fundamentally distinct from a single remote station that transmits on a reverse link comprising a plurality of subchannels.

7. We understand that the Examiner also contends that the '723 patent teaches that a combination of channels can be combined for a specific data rate.

8. We strongly disagree with the Examiner's contention that the '723 patent teaches that a combination of channels can be combined for a specific data rate.

9. The intent of the multiple channels in the '723 patent is NOT to have a single remote station transmit on multiple channels, but rather to (1) demarcate different data rates and (2) provide for additional capacity to allow more than one remote station to employ the same data rate without resulting in a catastrophic collision.

10. The '723 patent demarcates different data rates by associating each of the multiple channels with one of the data rates. A single remote station selects ONE of the channels based on the data rate that the remote station elects to employ and transmits on the selected channel. This relieves the base station from having to do a blind data rate determination because the base station can determine the data rate that the remote station is employing based on the data rate associated with the channel selected by the remote station.

11. The '723 patent provides for additional capacity by assigning multiple codes to a channel associated with a particular data rate. This allows more than one remote station to employ the same data rate without causing a catastrophic collision by having each remote station employing the same data rate use a different code assigned to the channel associated with the data rate. The different codes distinguish the remote stations employing the same data rate.

12. Under no circumstance does the '723 patent teach a single remote station transmitting on a combination of the multiple channels for a specific data rate. Rather, the '723 patent teaches a single remote station selecting ONE of the available channels based on the data rate that the remote station elects to employ and transmitting on the selected channel.

14. For at least the reasons given above, we believe that the '723 patent clearly does not teach the feature "receiving, by the apparatus, from a single remote station a reverse link signal that comprises a plurality of subchannel signals" recited in claim 14 of the '621 application.

15. Not only does the '723 patent not teach the above feature recited in claim 14 of the '621 application, having a single remote station transmits on multiple channels would substantially degrade performance in the packet data scheme employed in the '723 patent. This

is because transmitting on multiple channels would require the remote station in the '723 patent to divide its total transmit power between the multiple channels. In doing so, the packet detection probability for each channel would be substantially reduced due to reduced received power and increased interference for each channel.

16. As an example, assume, for the sake of argument, that the remote station in the '723 patent were to transmit on two channels operating at the same data rate. Each transmitted packet would contain a preamble section to facilitate time and frequency acquisition by the receiver and the remote station would allocate half of its transmit power to each packet. This would substantially degrade performance from an acquisition perspective because each preamble section would be received at a 3 db lower operating point, substantially decreasing the probability of detection at the receiver. As a result, the time and frequency estimates derived during acquisition would have a larger variance, leading to degradation in the demodulation and decode performance of the data portion of each packet. Further, both packets would interfere with each other, further reducing the detection probability.

17. Also, having the remote station in the '723 patent divide its available transmit power among multiple channels would be completely self-defeating. This is because the reduced transmit power for each channel would lower the received signal-to-noise ratio, which implies that the remote station must reduce the data rate employed to insure that the transmission is received error free. Therefore, in effect, one skilled in the art would not reasonably expect that having the remote station in the '723 patent transmit on multiple channels would increase the achieved data rate, as the Examiner seems to be suggesting.

18. The optimal strategy for the data packet scheme in the '723 patent is for the remote station to transmit a single preamble and allocate full transmit power to this portion of the packet.

19. For at least the reasons given above, we believe that not only does the '723 patent not teach a single remote station transmitting on multiple channels in a reverse link, but that doing so would substantially degrade performance in the data packet system in the '723 patent.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that any such willful false statement may jeopardize the validity of the application or any patent issued thereon.

July 19, 2010
Date

Jay R. Walton

9 July 2010
Date

John Ketchum